

WATER QUALITY

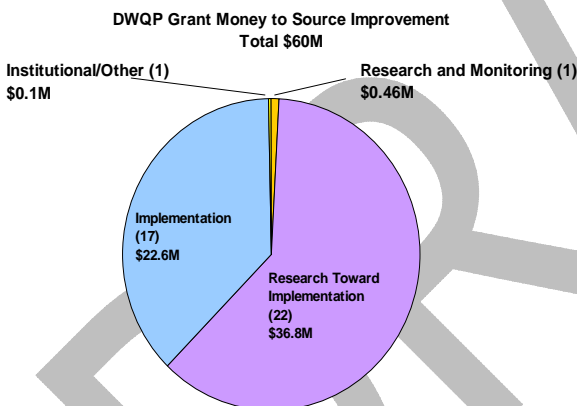
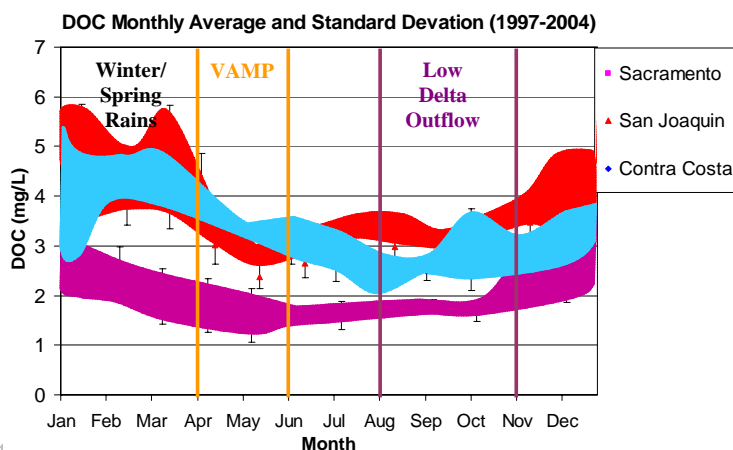
ORGANIC CARBON

CALFED is focusing its drinking water quality efforts on closing the gap between Safe Drinking Water Act and Clean Water Act implementation in the Bay-Delta system. CALFED is doing this by augmenting existing non-point source pollution control programs, assisting in local water quality planning, exploring water management changes, and investing in demonstrations of treatment technology.

The Indicator:

Dissolved organic carbon (DOC) in the Delta and its tributaries combines with bromide and other salts during the disinfection process and creates byproducts that are harmful to human health. The CALFED ROD set a target of 3 mg/L DOC at Delta drinking water intakes. (Add ecosystem concerns here)

DOC in the Delta is primarily influenced by runoff in the upstream tributaries (in urban and agricultural areas) and by the peat soils in the Delta Islands.



Current Activities

CALFED is focusing its efforts on learning more about the nature of organic carbon, investing in non-point source control projects, demonstrating new treatment technologies and studying alternative sources. CALFED has focused its investments in research and implementing Nonpoint source improvements. Specifically, CALFED has funded USGS research into the quality of organic carbon and its relationship to disinfection by-product formation.

Future Activities

CALFED is anticipating significant work in answering the management and scientific questions concerning organic carbon, and it is a high priority in the recently completed DWQP Strategic Plan. Building upon the Science Program, the Central Valley Drinking Water Policy project will further refine conceptual models for top drinking water constituents of concern. The development of regional water quality plans will also inform CALFED as to the importance of organic carbon reduction to drinking water utilities.

Organic Carbon Metrics

- Project-Specific
- Representative Delta Islands
- Delta Tributary Mainstems
- Delta Drinking Water Intakes
- Presence of other Precursors
- Affect within Treatment Disinfectant Processes

WATER QUALITY

Salinity and Bromide

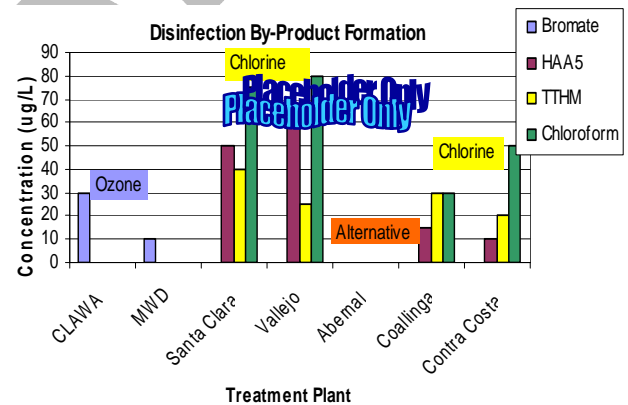
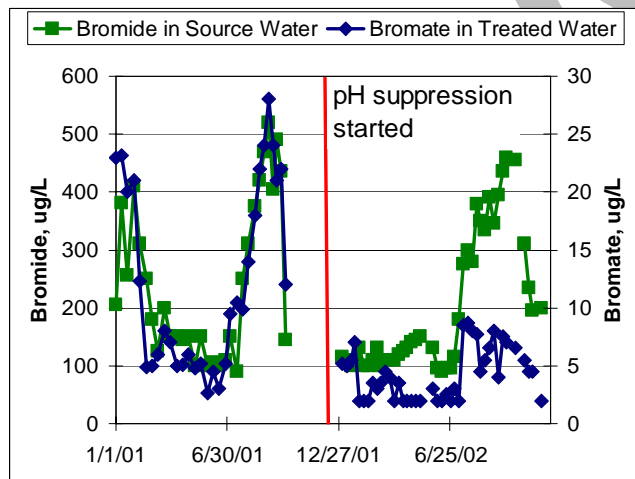
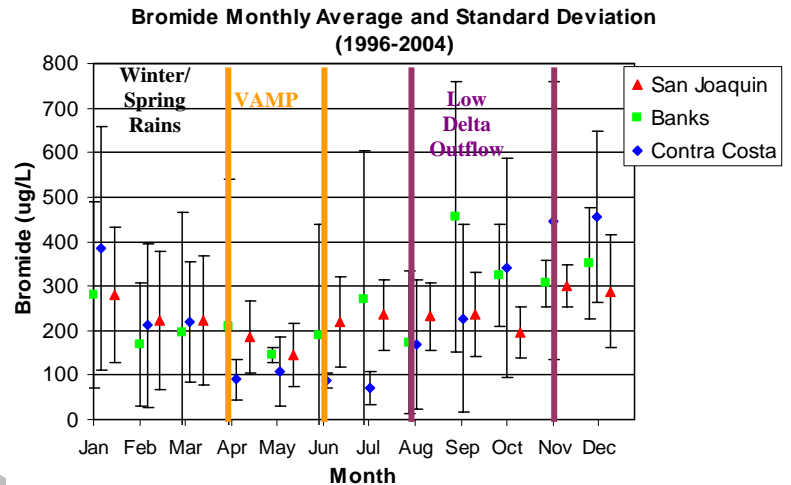
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The Indicator:

Bromide in the Delta and its tributaries combines with organic carbon during the disinfection process and creates byproducts that are harmful to human health. The CALFED ROD set a target of 50 ug/L Br at Delta drinking water intakes. (Add salinity concerns here, treatment picture)

Current Activities

CALFED is focusing its efforts on improving the conveyance of our Delta water supply, identifying alternative sources, and demonstrating new treatment technologies. relationship to disinfection by-product formation. Two funded demonstration projects have shown promising results.



Future Activities

There are major efforts related to salinity in two regions: San Joaquin and the Delta. The Central Valley Regional Water Quality Control Board has adopted a TMDL for Salinity on the lower San Joaquin River and stakeholders have joined together to implement measures to meet its objectives. CALFED is also pursuing Conveyance and Storage activities which have water quality improvement as one of their many objectives.

Bromide Metrics

- Project-Specific
- Conveyance/Storage Modeling Estimates
- Delta Tributary Mainstems
- Delta Drinking Water Intakes
- Presence of other Precursors
- Affect within Treatment Disinfectant Processes